

PATENT CLAIMS:

1. A method of manufacture of a composite product comprising at least one layer of reinforced woven material and at least one layer of PTFE foil or ePTFE foil, where the foil or foils are laminated together with the layer or layers of woven material under the use of heating and pressurising,
- 10 characterised in that the composite material subsequently is cooled to a fully or partly fixed state.
2. A method according to claim 1, characterised in that the cooling is carried out over a period of time 15 of approximately 0.1 to 240 seconds from a temperature of 300 to 420 °C, preferably 20 to 120 seconds from a temperature of 380 to 400 °C to a temperature of about 50 °C.
- 20 3. A method according to claim 1 or 2, characterised in that the composite material is subject to a tension during the cooling.
4. A method according to claims 1-3, characterised 25 in that the composite material undergoes a combined cooling and pressure operation by means for pressure application.
5. A method according to claims 1-4, characterised 30 in that the means for pressure supply is provided with cooling means.

6. A method according to claims 1-5, characterised in that the pressure supply is provided continuously by means for pressure supply comprising at least one roller.

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7. A method according to claims 1-6, characterised in that the pressure supply is provided intermittently by means for pressure supply comprising a pressure surface.

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8. A method according to claims 1-7, characterised in that the composite material is cooled under a substantively uniform pressure over the surface by a cooling surface.

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9. A composite product manufactured according to the claims 1-8, characterised in that the product comprises at least one foil layer of PTFE or ePTFE foil and at least one layer of reinforcing woven material.

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10. A composite product according to claim 9, characterised in that the reinforcing woven material consists at least partly of glass fibre fabric or PTFE coated glass fibre fabric.

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11. An apparatus for manufacture of a composite material comprising at least one layer of reinforcing woven material and at least one layer of PTFE foil or ePTFE foil, where the foil or foils are laminated together with the layer or layers of woven material under the use of heating and pressurising, as the apparatus comprises means for lamination of the composite material by a combined pressure and heat supply,

characterised in that the apparatus further comprises means for fixation of the uncooled or at least only partly cooled composite material and with said means co-operating controllable cooling means.

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12. An apparatus according to claim 11, characterised in that the means of the apparatus for fixation and the associated controllable cooling means comprises at least one pressure surface including 10 integrated cooling means.

13. An apparatus according to claim 11, characterised in that the means of the apparatus for fixation and the associated controllable cooling 15 means comprises at least one roller having integrated cooling means.